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EXAMINER

HO, THOMAS M

ART UNIT PAPER NUMBER

2134

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/942,072

Applicant(s)

HINES, LARRY LEE

Examiner

Thomas M. Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Claims 1-26 are pending.
2. Claims 1-6 are allowable.

Response to Arguments

3. Applicant has argued

“There is no reference whatsoever in Holloway regarding the use of two servers, much less establishing a first secure connection...”, page 11, paragraph 1.

The Applicant additionally argues on page 11, paragraph 2:

“Thus it is clear that at most, the Holloway system simply employs the same single server, single secure connection system described as prior art in the present application”

The Examiner contends that (Column 7, lines 47-60) recites:

In operation, when a user claiming to be authorized accesses WWW page 135 on web server 136 via browser 105 on client 110, server system 130 compiles applet Ap. Applet Ap includes the claimed users and encrypted private key Epppu(Sku) stored on key server 138...”

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Clearly, the Applicant's most immediate contention is incorrect. Holloway discloses a reference regarding the use of a web server, item 136 and key server, 138. Therefore, Holloway at the very least discloses the "use" of two servers.

Applicant has further argued, (paragraph 1, page 12):

While the server computer system 130 includes a web server computer 136 and a key server computer 138, as illustrated in Figure 1, elements 136 and 138 are clearly part of the same server system 130.

The Examiner contends that even if servers 136 and 138 are part of the same server system, they are still considered by Holloway to be two servers. The fact remains that Holloway has maintained a distinction between the two entities. For this reason, the Examiner has interpreted server 136 and 138 to be a first and second server.

Additionally, the Examiner contends that Applicant's first and second servers themselves may be considered a part of the same "system." Claim 7 clearly has servers 1 and 2 interacting for a specific singular method as recited in claim 7. By, applicant's own reasoning, the first server and second server of claim 7 may be anticipated by a singular server, because the first and second server are apart of the same system.

Applicant has further argued, (paragraph 1, page 12):

Even if these elements could be interpreted as being separate servers(i.e. first server and second server), it is clear that the key server computer 138 is coupled to the web server

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computer 136 through firewall 137. There is no respective connection from the key server 138 to the client computer system 110.

The Examiner contends however that those of ordinary skill in the art understand that a connection between two points may employ multiple nodes in between. For example, if a person A calls up a person B via telephone, regardless of the fact that there is an operator in between, or telephony apparatus, it is understood that a connection exists between person A and person B.

The Examiner notes that the Internet is a world wide network consisting of billions of nodes using TCP/IP protocol. When a client A connects with a server B, the connection between the two nodes may potentially hundreds of intermediary nodes in the connection. The connection between the client and server is broken up into its constituent packets, each of which is sent across a potentially different path before being assembled at their destination.

Despite this, those of ordinary skill in the art nevertheless understand that a connection exists between nodes A and B.

Claim Rejections - 35 USC § 103

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 7-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holloway, US patent 6424718.

In reference to claim 7:

Holloway(Column 7, lines 45 – Column 9, line 65) discloses a method of providing and authenticating secret data over a network, the network comprising a user device, a first server, a second server, and a host application, comprising:

- Establishing a first secure connection between the user device and the first server in response to an enrollment request from a user; (Column 7, lines 45-60)
- Sending encrypted enrollment information from the host application to the first server. (Column 8, lines 15-34) & (Column 9, lines 55-65)
- Decrypting the enrollment information at the first server. (Column 8, lines 30-35) & (Column 4, lines 50-55)
- Sending an enrollment applet and a unique identifier from the first server to the user device, the unique identifier identifies the user device; (Column 7, lines 45-60)

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- Establishing a second secure connection between the user device and the second server, encrypting an access code using the enrollment applet. (Column 8, lines 55-67)
- Linking the encrypted access code with the unique identifier and thereafter sending the linked encrypted access code and the unique identifier to the second server. (Column 9, lines 1-10) & (Column 8, lines 33-55)
- Encrypting the linked data at the second server and thereafter sending the encrypted linked data to the host application. (Column 9, lines 10-25)
- Verifying the unique identifier at the host application and thereafter creating authentication data (col 7, 61-67) & (col 9, 55-67) & (col 9, 1-10)
- Encrypting the authentication data with the access code. (col 8, lines 15-30)
- Sending the encrypted authentication data and access code from the host application to the second server (Column 8, line 53-67)
- Sending the encrypted authentication data and access code from the second server to the enrollment applet using the second secure connection; (Column 8, line 53-67)
- Storing the encrypted authentication data and access code in the enrollment applet. (Column 7, lines 45-60) & (col 8, lines 15-30, 60-67)

Minor differences in Holloway with the invention exist. Holloway doesn't explicitly state the encrypted authentication data and access code in the applet are stored together. Nevertheless, this is implied because the user enters the authentication data through the

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applet, which means the applet must at least store the data as variables to be later transmitted to the server.

No explicit decryption process is mentioned at the first server, but Holloway mentions a process of validation. It is officially noted that it is commonly known in the art that validation of encrypted data involves a decryption process to check the contents of the encrypted data.

It would have been obvious to one of ordinary skill in the art to validate the encrypted data using a decryption process in order to effectively check whether the data is what it is purported to be.

Claim 14, 18 are rejected for the same reasons as claim 7.

In reference to claim 11:

Holloway (col 7, 60-67) & (col 8, 15-30) discloses encrypting and sending an enrollment applet, a public key, a serial number and an account number from the host to the first server, and decrypting the enrollment applet, a public key, a serial number and an account number at the first server.

In reference to claim 15:

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Holloway discloses the method of claim 14, wherein storing the encrypted authentication data and access code includes storing at least a portion of the authentication data and the access code in the enrollment applet. (column 8, lines 60-67)

In reference to claim 19:

Holloway discloses the system of claim 18, wherein the first and second secure connections are SSL connections. (Column 7, lines 62-67) & (Column 7, lines 40-46)

In reference to claim 20:

Holloway discloses the system of claim 18, wherein the enrollment applet establishes the second secure connection in response to a user entering enrollment information.

In reference to claim 21:

Holloway (Column 7, lines 45-60) and (Column 8, lines 15-50) et seq. discloses the system of claim 18, further comprising a plurality of hardware service module, one each coupled to the first server, the second server and the host application (Column 9, lines 55-65), for performing cryptography, where the performing of cryptography is the encryption process.

In reference to claims 22 & 23:

Holloway fails to disclose the system of claim 18, wherein the user device comprises a personal digital assistant or a personal computer.

Holloway discloses that client "110" is used by the user to access the server system.

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(column 7, lines 48-50)

The Examiner takes official notice that the user of personal digital assistant or personal computers as clients was well known at the time of invention. For example, a user accessing stock information with a PDA or a user surfing the internet on a home computer are examples in which the PDA and personal computers act as clients.

It would have been obvious to one of ordinary skill in the art at the time of invention to access the server using a PDA or computers, because such “clients” are readily available on the market and accessible to be sold to people to allow them access to the Internet.

In reference to claim 24:

Holloway discloses (Column 8, lines 15-25) the system of claim 18, wherein at least a portion of the enrollment applet is stored on a smart card device, wherein the smartcard may be used to access an account from at least one remote location.

In reference to claim 25:

Holloway fails to explicitly disclose the system of claim 18, wherein the access code is a personal identification number (PIN).

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The Examiner takes official notice that usage of a PIN as an access code was well known at the time of invention. The advantage of a PIN number of course is lightweight, easy to remember passcode which may be used to authenticate a user. PIN numbers are widely used as passcodes in computer and ATMs.

It would have been obvious to one of ordinary skill in the art to use a PIN in order to authenticate the user with a simple mechanism that doesn't overburden the memory of the user.

In reference to claim 26:

Holloway discloses the system of claim 18, wherein the access code is a password, where the password is a pass-phrase. (Column 47-60)

Claim 8 is rejected for the same reasons as claim 25.

Claim 9 is rejected for the same reasons as claim 26.

Claim 10 is rejected for the same reasons as claim 15.

Claim 16, 12 are rejected for the same reasons as claim 22.

Claim 17, 13 are rejected for the same reasons as claims 22 and 24.

Conclusion

6. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of the final action and the advisory action is not mailed under after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension pursuant to 37 CFR 1.136(A) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication from the examiner should be directed to Thomas M Ho whose telephone number is (571)272-3835. The examiner can normally be reached on M-F from 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (571)272-3838.

The Examiner may also be reached through email through Thomas.Ho6@uspto.gov

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

General Information/Receptionist Telephone: 571-272-2100 Fax: 571-273-8300

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TMH

February 17th, 2006


EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER